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ENGINE TORQUE CONTROL WITH DESIRED STATE ESTIMATION

ABSTRACT OF THE DISCLOSURE

An engine control system and method according to the invention controls torque in an internal combustion engine. Engine parameters are measured and an engine torque is estimated. A desired air per cylinder of the engine is calculated. A desired manifold absolute pressure of a manifold of the engine is calculated based on a function of engine torque. A desired RPM of the engine is calculated based on a measured engine RPM and a reference torque of the engine. A desired area is calculated based on the desired manifold absolute pressure. The desired area is implemented into the controller to control torque output of the engine.